

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.**

Application Serial Number: 10/535,545  
Source: IFWP  
Date Processed by STIC: 6/14/06

***ENTERED***



IFWP

**RAW SEQUENCE LISTING**  
**PATENT APPLICATION: US/10/535,545**

**DATE: 06/14/2006**  
**TIME: 10:32:40**

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4 (S.C.R.A.S.)
6 <120> TITLE OF INVENTION: Process for preparing recombinant heterocarpine
8 <130> FILE REFERENCE: RS 331 PCT
C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/535,545
C--> 10 <141> CURRENT FILING DATE: 2005-05-18
10 <150> PRIOR APPLICATION NUMBER: FR 02/15563
11 <151> PRIOR FILING DATE: 2002-12-10
13 <160> NUMBER OF SEQ ID NOS: 14
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19 <212> TYPE: PRT
20 <213> ORGANISM: Pilocarpus Heterophyllus (peptide fragment)
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47 1 5
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55 <220> FEATURE:
56 <223> OTHER INFORMATION: Primer for 5' specific cDNA products
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63 <211> LENGTH: 38
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65 <213> ORGANISM: Artificial Sequence

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67 &lt;220&gt; FEATURE:

68 &lt;223&gt; OTHER INFORMATION: Primer for 3' specific cDNA products

70 &lt;400&gt; SEQUENCE: 5

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38

74 &lt;210&gt; SEQ ID NO: 6

75 &lt;211&gt; LENGTH: 1675

76 &lt;212&gt; TYPE: DNA

77 &lt;213&gt; ORGANISM: Pilocarpus Heterophyllus (5' cDNA fragment of the cDNA encoding for

W--&gt; 78 heterocarpine)

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85 tcttaggaatg gtgttcttca ttatttcctt ttcgttctt catggcttctt gttggcgct 180

87 ctccatgcta actcaagttc ggatgagaga tcaacatata tagttcatat ggacaagacc 240

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93 tacgacaatg ctgctcatgg tttcagtgcg gtttatctc aacaggaact tgaaaactcta 420

95 aaaaagtctc caggttcgt ctcagtttat gccgataaga cagcgacact tgacaccacc 480

97 catatccctg aattttctc cctgaatact gccaacgggt tggccctgc ttcaaagtat 540

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105 atcattgcgg caaatccctgg gattaacattt agcatgaaat ctgcccggaga tactatgggg 780

107 catgggactc acacatccctc cacagttgtt gggattatg tggatggcgt ttcatctt 840

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111 gtcatttttg acgaaggcgt ctatgcattt gatgttctt ccggatggat cgcggctattt 960

113 gctgatgggt ttgatgtat ttcaatatca atggattttt atgagacccc gtttatgaa 1020

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123 tataacaaga cttactctgc atgcaactca actcgattt tatctcaact ccgaactgac 1320

125 gccatcatcg tatgcagaaga agctgaagat tcggatcttgc agcaaataatc tttgtcagt 1380

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129 ggtgggtgtt ctattccctgg tggatgttgc agcccaagg atgcaccggc tggatgtcagc 1500

131 tacgcccagca atgatgtgaa acctaaggca agcatcaatg tccaaacaaac tttctgggc 1560

133 acaaaggcctg caccagccgt ggcttctat acttcttagag gtcgcgtacc gagctatcca 1620

135 ggcatctttaa agccagatattt aatggccctt gggtcactatg tttttgtcgtc ttgaa 1675

138 &lt;210&gt; SEQ ID NO: 7

139 &lt;211&gt; LENGTH: 1689

140 &lt;212&gt; TYPE: DNA

141 &lt;213&gt; ORGANISM: Pilocarpus Heterophyllus (3' cDNA fragment of the cDNA encoding for

W--&gt; 142 heterocarpine)

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147 tgagaccccg ttgtatgttgc atcctatagc aatttcgttca ttccgttgcgtt cagagaagg 120

149 cgtatgtgtt tcatttcgttca cagggaaatgc agggccagcg cttagggatgttgcataatgg 180

151 aatccatgg acgttaacttgc ttgcgttgc aaccatttgc cgttcatgg caggcactat 240

153 aactcttggg agtggggaaa ccatcattgg atggacaatg ttcccgccatgttgc ttgaa 300

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DATE: 06/14/2006

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163	tgcaccggct gtgatcagct acgccAGCAA tgatgtgaaa cctaaggcaa gcatcaagtt	600
165	ccaacAAACT gttctggca caaAGCCTGC accagccgtg gcttctata ctcttagagg	660
167	tccgtcaccc agctatccag gcatcttAAA gccagatata atggcccgt ggtcaactgt	720
169	tttgctgct tggatccaa atactyctac agccAAATT ggTTGAATA ccctcttgac	780
171	aagtgaatac aatatggttt ctggAACATC aatggcctgc cctcatgtc ctgggttagc	840
173	tgctctcctt aaggGCGCAC accctgaatg gagtgcaGCT gctatttagt ctgcaatgtat	900
175	gactacagca aatcccttgg ataacacact aaatCCAATC cgggacaatg gtctaattCAA	960
177	tttcacatct gctcacctt tagctatggg agccggccaa gttgatccta atcgggact	1020
179	tgatcctgg tTGATTATG AAACCACCC ACAAGATTAT gtgagcctcc tctgcactct	1080
181	gaacttcacc caaaACAAA TCTGTCCAT tacaagatca aaccgttaca gctgtccac	1140
183	ccctaattcct gatcttaact atccttctt tattactta cactacaaca caaatgcaac	1200
185	atttGTTCAg actttcaca ggactgtgac taacGTTGGA ggaAGCGCTA caacttacaa	1260
187	ggccaagatc actgctcctc taggttctgt agttagtgc tcaccagaca cattggcctt	1320
189	cagaaAGCAG tatgagcAGC agagctacGA gctcaactatt gagtacaAGC ctgtgggtGA	1380
191	aaaaactgtt tcattGGGG aacttgtttG gattGAAGAA aatGGGAATC acactgtgag	1440
193	gagccctatt acagtgtcac cttccatgag taactttgtg tttatggta cacaataatt	1500
195	gataaaaaatt tGTTCTGATC acaactgtgg gaataatcgA cgTTTATGAA CCCAGAATAA	1560
197	gttGTTGGT cgtctcaac attatcataa aggacttgaa tcatgtgt tGATTTCTG	1620
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228	ggTGAAGATA TAATTGTTGG TGTTATTGAC AGCGGTGTCT ggccggagAG tgaaagtat	600
230	aatatgtatG gtatGGGCGC tattccaAGC agatggaaAG gagaatgtGA agctggacaa	660
232	gagttcaatt cctccatgtc caactcaaAG cttattggag cttagatattt cgataagggt	720
234	atcattgcgg caaatctgg gattaacatt agcatgaaAT ctgcccAGAGA tactatgggg	780
236	catgggactc acacatcctc cacagtgtct ggaaattatG tggatggcgT ttcatcttt	840
238	ggctatgcta aaggtaCAGC AAAAGGAGTG gcaccacGGG cgagagtggc tatgtacaAG	900
240	gtcattttG acgaAGGGCG ctatgcattc gatGTTCTG ccggatGGA cgccgctatt	960
242	gctgatgggt ttgatgtaat ttcaatatacA atgggatttG atgagacccc gttgtatgaa	1020
244	gatcctatacG caattgcctc attcgctgt acagagaagg gcgtatgtgt ctatcttca	1080
246	gcaggAAATG cagggccAGC gctaggAGC ttGACAATG gaatccatG gacGTTAAct	1140
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254	gccccatcatcg tatgcaaga agctgaagat tcggtatctg agcaaataatc tgggttcagt	1380
256	gcatcgaaca ttccggggagc catatttttt tcagattatg atgctgaatt atttgaactt	1440
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262	aaaaaaggttg caccagccgt ggctttctat acttcttagag gtcgggtcacc gacatatacca	1620
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266	aatactgcta cagcccaaat tggtttgaat accctcttga caagtgaata caatatggtt	1740
268	tctggAACAT caatggcctg ccctcatgtc gctgggttag ctgtctccct taaggggcga	1800
270	caccctgaat ggagtgcagc tgctttagg tctgaatga tgactacagc aaatcccttg	1860
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276	gaaaccaccc cacaagatta tgtgagccctc ctctgcactc tgaacttcac caaaaccaa	2040
278	atccctgtcca ttacaagatc aaaccgttac agtgcgtcca cccctaatacc tgatcttaac	2100
280	tatccttctt ttattacttt acactacaac acaaataatc catttgttca gactttcac	2160
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340	ttaactgttg cagctggaaac cattgacccgt tcatgtgc gcaactataac tcttggaggt	1080
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366	tcacctttag	ctatggagc	cggccaaagt	gatcctaattc	gggcacttga	tcctggtttg	1860
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380	tttgggaac	ttgttggat	ttggaaaat	ttggaaatcaca	ttgtgaggag	cccttattaca	2280
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386 <211> LENGTH: 774

387 <212> TYPE: PRT

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417					100			105						110		
420	Ala	Asp	Lys	Thr	Ala	Thr	Leu	Asp	Thr	Thr	His	Thr	Pro	Glu	Phe	Leu
421					115			120						125		
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**VERIFICATION SUMMARY**

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L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date

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